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Before the
Federal Communications Commission
Washington, D.C. 20554

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In the Matter of)
)
Application of Verizon New England Inc.,)
Bell Atlantic Communications, Inc. (d/b/a)
Verizon Long Distance), NYNEX Long)
Distance Company (d/b/a Verizon Enterprise)
Solutions) And Verizon Global Networks Inc.,)
For Authorization to Provide In-Region,)
InterLATA Services in Massachusetts)

CC Docket No. 01-9

FILED

MEMORANDUM OPINION AND ORDER

Adopted: April 16, 2001

Released: April 16, 2001

By the Commission: Chairman Powell and Commissioner Ness issuing separate statements;
Commissioner Furchtgott-Roth concurring and issuing a statement; and Commissioner Tristani
dissenting and issuing a statement.

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I. INTRODUCTION

1. On January 16, 2001, Verizon New England Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions), and Verizon Global Networks Inc. (Verizon) filed this application pursuant to section

271 of the Communications Act of 1934, as amended,¹ for authority to provide in-region, interLATA service originating in the state of Massachusetts.² We grant this application in this Order based on our conclusion that Verizon has taken the statutorily required steps to open its local exchange markets to competition in Massachusetts.

2. In approving this application, we wish to recognize the hard work of the Massachusetts Department of Telecommunications and Energy (Massachusetts Department) in laying the foundation for approval of this application. The Massachusetts Department has conducted critically important proceedings concerning Verizon's section 271 compliance open to participation by all interested parties. The Massachusetts Department and Verizon also provided for third-party testing of Verizon's operations support systems (OSS) offering. In addition, the Massachusetts Department adopted a broad range of performance measures and standards and a Performance Assurance Plan designed to create a financial incentive for post-entry compliance with section 271. State proceedings such as these serve a vitally important role in the overall section 271 approval process.

3. We also commend Verizon for all of the work that it has undertaken to open its local exchange market to competition in Massachusetts. For example, Verizon states that competitive local exchange carriers (competitive LECs) serve more than 513,000 lines on a facilities basis in Massachusetts, with Verizon providing more than 333,000 interconnection trunks and 1,700 collocation nodes to competitive LECs. Verizon also states that it provides more than 93,000 unbundled local loops, including more than 69,000 stand-alone unbundled local loops and more than 23,000 unbundled loops provided as part of an unbundled network element platform (UNE-P). There is also an active resale market in Massachusetts. Verizon states that it provides more than 268,000 resold local exchange lines, including 238,000 business lines and 30,000 residential lines. These results bear out the fact that Verizon has made extensive efforts to open its local markets in compliance with the requirements of the Act.³

II. BACKGROUND

A. History of this Application

4. In the 1996 amendments to the Communications Act, Congress required that the Bell Operating Companies (BOCs) demonstrate compliance with certain market opening requirements contained in section 271 of the Act prior to entering the in-region, interLATA market. Congress also provided for Commission review of BOC applications to provide such

¹ In 1996, Congress amended the Communications Act of 1934 to foster the development of local exchange competition, among other things. The Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996). We refer to the Communications Act of 1934, as amended by the Telecommunications Act of 1996, as the Communications Act or the Act.

² Supplemental Filing of Verizon New England, CC Docket No. 01-9 (filed Jan. 16, 2001) (Verizon Massachusetts II Application).

³ See *id.* Attach. A.

services in consultation with the affected state and the Attorney General. The Commission has summarized the applicable statutory framework in a number of prior orders and need not repeat this material here.⁴

5. On May 24, 1999, Verizon filed a draft section 271 application with the Massachusetts Department.⁵ The Massachusetts Department conducted a sixteen-month investigation of Verizon's compliance with section 271. These proceedings were open to full participation by all interested parties. This process included: a comprehensive third-party test of Verizon's OSS; numerous technical sessions with the Department's staff, Verizon and many competitive LECs; a series of public hearings and oral arguments; and hundreds of information requests.

6. In August of 1999, the Massachusetts Department contracted with KPMG consulting, L.L.C. to perform a third-party test of Verizon's OSS performance. In January 2000, the Massachusetts Department adopted the performance metrics developed in the New York carrier-to-carrier proceeding as the metrics to be used and replicated by KPMG in evaluating Verizon's performance in Massachusetts.⁶ On September 7, 2000, KPMG issued its final report, which found that Verizon satisfied 800 of 804 test points relating to its review of Verizon's OSS.⁷

7. Verizon filed its initial application for section 271 authority for the state of Massachusetts (the Massachusetts I Application) on September 22, 2000,⁸ but later chose to

⁴ See, e.g., *Joint Application by SBC Communications Inc., Southwestern Bell Tel. Co., and Southwestern Bell Communications Services, Inc., d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma*, Memorandum Opinion and Order, FCC 01-29, CC Docket No. 00-217, paras. 7-10 (rel. Jan. 22, 2001) (*SWBT Kansas/Oklahoma Order*); *Application by SBC Communications Inc., Southwestern Bell Tel. Co., and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 To Provide In-Region, InterLATA Services in Texas*, Memorandum Opinion and Order, 15 FCC Rcd 18354, 18359-61, paras. 8-11 (2000) (*SWBT Texas Order*); *Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York*, Memorandum Opinion and Order, 15 FCC Rcd 3953, 3961-63, paras. 17-20 (1999) (*Bell Atlantic New York Order*).

⁵ See Verizon Massachusetts I Application App. B, Vol. 1a-aa, Tab 2 (Massachusetts DTE, D.T.E. 99-271, *Inquiry by the Department of Telecommunications and Energy pursuant to Section 271 of the Telecommunications Act of 1996 into the Compliance Filing of New England Telephone and Telegraph Company d/b/a Bell Atlantic-Massachusetts as part of its application to the Federal Communications Commission for entry into the in-region interLATA (long distance) telephone market*).

⁶ See Verizon Massachusetts I Application App. B, Vol. 24, Tab 282 (Massachusetts DTE, D.P.U. 99-271, *Evaluation of Bell Atlantic-Massachusetts Operations Support Systems: Final Attachment A to 11/19/99 Letter Order on Final Master Test Plan* (Jan. 14, 2000)).

⁷ See generally Verizon Massachusetts I Application App. I, Vol. 1a-b (KPMG Final Report).

⁸ Application by Verizon New England for Authorization to Provide In-Region, InterLATA Services in Massachusetts, CC Docket No. 00-176 (filed Sept. 22, 2000) (Verizon Massachusetts I Application).

withdraw it.⁹ Verizon filed another application for Massachusetts (the Massachusetts II Application) on January 16, 2001.¹⁰ The Massachusetts II Application incorporates the material in the original application by reference to demonstrate compliance with most of the section 271 requirements. It also provides additional information concerning Verizon's provision of DSL-capable local loops, the availability of loop make-up information and line sharing. In addition, competitive LECs now have access to Verizon's carrier specific performance data.¹¹

B. Evaluations of Massachusetts Department and Department of Justice

8. The Massachusetts Department supports Verizon's application to provide in-region, interLATA long distance service originating in Massachusetts. Specifically, it concluded that Verizon had met the requirements of section 271, and urged the Commission to approve Verizon's in-region, interLATA entry in both its October 16, 2000 evaluation of the Massachusetts I Application,¹² and its February 6, 2001 evaluation of the Massachusetts II Application.¹³

9. The Department of Justice filed its evaluation of Verizon's Massachusetts I Application on October 27, 2000.¹⁴ It recommended that the Commission not approve the application until Verizon had demonstrated that it provides nondiscriminatory access to DSL-capable loops and established suitable performance measures with unambiguous benchmarks for DSL-capable loops.¹⁵ The Department of Justice submitted an evaluation of Verizon's

⁹ See Letter from Michael E. Glover, Senior Vice President & Deputy General Counsel, Verizon, to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket No. 00-176 (filed Dec. 18, 2000).

¹⁰ Verizon Massachusetts II Application.

¹¹ The availability of this information plays a critical role in the ability of competitive LECs to participate in the section 271 application review process.

¹² Evaluation of the Massachusetts Department of Telecommunications and Energy, CC Docket No. 00-176 (filed October 16, 2000) (Massachusetts Department Massachusetts I Comments). On November 3, 2000, the Massachusetts Department filed its reply (Massachusetts Department Massachusetts I Reply).

¹³ Evaluation of the Massachusetts Department of Telecommunications and Energy, CC Docket No. 01-9 (filed February 6, 2001) (Massachusetts Department Massachusetts II Comments). On February 28, 2001, the Massachusetts Department filed its second reply (Massachusetts Department Massachusetts II Reply).

¹⁴ Evaluation of the United States Department of Justice, CC Docket No. 00-176 (filed October 27, 2000) (Department of Justice Massachusetts I Evaluation).

¹⁵ See Department of Justice Massachusetts I Evaluation at 2. The Department of Justice found that, "although Verizon has satisfied this standard in most respects, important issues remain inadequately addressed." *Id.* It noted that the principal issue on which Verizon had failed to develop an adequate record was its provision of DSL-capable loops. See *id.* The Department concluded that Verizon had not yet demonstrated that it provides nondiscriminatory access to DSL-capable loops, including line sharing, or that adequate performance mechanisms were in place to deter backsliding. See *id.* at 24. The Department of Justice recommended that we not permit Verizon to offer interLATA services in Massachusetts until Verizon demonstrated that it has resolved these shortcomings. See *id.* at 3.

Massachusetts II Application on February 21, 2001.¹⁶ It recognized that a “number of changes have taken place” since it filed its evaluation of the Massachusetts I Application and acknowledged that the second Verizon application “shows improvement in some aspects of Verizon’s performance in providing access to DSL loops,” although it highlighted several remaining disputed issues related to the provision of nondiscriminatory access to DSL-capable loops.¹⁷ The Department of Justice stated that it was unable to resolve those remaining issues based on the record on file at the time of its evaluation.¹⁸ As a result, it stated that it could not find at that stage of the proceeding that Verizon had adequately demonstrated its ability to provide nondiscriminatory access to DSL-capable loops.¹⁹ Recognizing that its evaluation reflected only the evidence in the record at the time of its evaluation, however, the Department of Justice urged the Commission to consider the full record -- as it developed in reply comments and *ex parte* submissions -- in its final determination.²⁰

III. PROCEDURAL AND ANALYTICAL FRAMEWORK

10. To determine whether a BOC applicant has met the prerequisites for entry into the long distance market, we evaluate its compliance with the competitive checklist, as developed in our local competition rules and orders in effect at the time the application was filed. Despite the comprehensiveness of our rules, there will inevitably be, in any section 271 proceeding, disputes over an incumbent LEC’s precise obligations to its competitors that our rules have not addressed and that do not involve *per se* violations of self-executing requirements of the Act. As the Commission has explained in prior orders, the section 271 process simply could not function as Congress intended if we resolved all such disputes as a precondition to granting a section 271 application.²¹ In prior orders, the Commission has explained the procedural rules it has

¹⁶ Evaluation of the United States Department of Justice, CC Docket No. 00-176 (filed February 21, 2001) (Department of Justice Massachusetts II Evaluation).

¹⁷ Department of Justice Massachusetts II Evaluation at 2-3. For example, the Department of Justice noted, among other things, that: (1) Verizon and the competing carriers modified, and the Massachusetts Department adopted, the carrier-to-carrier measures for DSL-capable loop performance and created a set of measures for line sharing; (2) Verizon submitted to the Massachusetts Department changes to its performance assurance plan, proposing to add additional DSL-capable loop and line sharing measurements and make DSL a separate mode of entry; (3) Verizon’s separate data affiliate, Verizon Advanced Data, Inc. (VADI), became fully operational in Massachusetts; (4) Verizon agreed to proceed with the development and deployment of a mechanism to provide competing carriers with electronic access to loop make-up information; and (5) Verizon conducted re-inspections of line sharing related collocation work, enabled some line sharing orders to flow through its systems without manual intervention, and established a wholesale service center dedicated to DSL-capable loops and line sharing. *See id.*

¹⁸ *See* Department of Justice Massachusetts II Evaluation at 3, 14; *see also id.* at 7-14 (describing issues in dispute).

¹⁹ *See id.* at 14.

²⁰ *See id.* at 15 & n.61.

²¹ *See SWBT Kansas/Oklahoma Order* at para. 19; *see also American Tel. & Tel. Co. v. FCC*, 220 F.3d 607, 631 (D.C. Cir. 2000).

developed to facilitate the review process.²² Here we describe how we consider the evidence of compliance that Verizon has presented to us in this proceeding.

11. As part of our determination that a BOC has satisfied the requirements of section 271, we consider whether the BOC has fully implemented the competitive checklist in subsection (c)(2)(B). The BOC at all times bears the burden of proof of compliance with section 271, even if no party challenges its compliance with a particular requirement. In demonstrating its compliance, a BOC must show that it has a concrete and specific legal obligation to furnish the item upon request pursuant to state-approved interconnection agreements that set forth prices and other terms and conditions for each checklist item, and that it is currently furnishing, or is ready to furnish, the checklist items in quantities that competitors may reasonably demand and at an acceptable level of quality.²³ In particular, the BOC must demonstrate that it is offering interconnection and access to network elements on a nondiscriminatory basis.²⁴ Previous Commission orders addressing section 271 applications have elaborated on this statutory standard.²⁵ First, for those functions the BOC provides to competing carriers that are analogous to the functions a BOC provides to itself in connection with its own retail service offerings, the BOC must provide access to competing carriers in “substantially the same time and manner” as it provides to itself.²⁶ For those functions that have no retail analogue, the BOC must demonstrate that the access it provides to competing carriers would offer an efficient carrier a “meaningful opportunity to compete.”²⁷

12. In past orders, the Commission has found that the most probative evidence of nondiscriminatory access to interconnection and UNEs is actual commercial usage, and “[p]erformance measures are an especially effective means of providing us with evidence of the quality and timeliness of the access provided by a BOC to requesting carriers.”²⁸ We expect that, in its *prima facie* case in the initial application, a BOC relying on performance data will:

²² See, e.g., *SWBT Kansas/Oklahoma Order* at paras. 21-27; *SWBT Texas Order*, 15 FCC Rcd at 18370-73, paras. 34-42; *Bell Atlantic New York Order*, 15 FCC Rcd at 3968-71, paras. 32-42.

²³ See *Bell Atlantic New York Order*, 15 FCC Rcd at 3973-74, para. 52.

²⁴ See 47 U.S.C. § 271(c)(2)(B)(i), (ii).

²⁵ See *SWBT Kansas/Oklahoma Order* at paras. 28-29; *Bell Atlantic New York Order*, 15 FCC Rcd at 3971-72, paras. 44-46.

²⁶ *SWBT Texas Order*, 15 FCC Rcd at 18373, para. 44; *Bell Atlantic New York Order*, 15 FCC Rcd at 3971, para. 44.

²⁷ *Bell Atlantic New York Order*, 15 FCC Rcd at 3971, para. 44; *Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, To Provide In-Region, InterLATA Services in Michigan*, Memorandum Opinion and Order, 12 FCC Rcd 20543, 20618-19, para. 141 (1997) (*Ameritech Michigan Order*).

²⁸ *Bell Atlantic New York Order*, 15 FCC Rcd at 3969, para. 53.

- a) provide sufficient performance data to support its contention that the statutory requirements are satisfied;
- b) identify the facial disparities between the applicant's performance for itself and its performance for competitors;
- c) explain why those facial disparities are anomalous, caused by forces beyond the applicant's control (*e.g.*, competing carrier-caused errors), or have no meaningful adverse impact on a competing carrier's ability to obtain and serve customers; and
- d) provide the underlying data, analysis, and methodologies necessary to enable the Commission and commenters meaningfully to evaluate and contest the validity of the applicant's explanations for performance disparities, including, for example, carrier specific carrier-to-carrier performance data.

13. The Massachusetts Department has adopted the performance metrics and standards established by the New York Commission. Under this framework, for functions with retail analogues, Verizon provides a figure indicating the degree of statistical significance for any differences in performance for competitors as compared to performance for its retail operations. For functions with a performance benchmark, Verizon provides data on its performance, which are then compared to the benchmark. The Commission has explained in prior orders that parity and benchmark standards established by state commissions do not represent absolute maximum or minimum levels of performance necessary to satisfy the competitive checklist. Rather, where, as here, these standards are developed through open proceedings with input from both the incumbent and competing carriers, these standards can represent informed and reliable attempts to objectively approximate whether competing carriers are being served by the incumbent in substantially the same time and manner, or in a way that provides them a meaningful opportunity to compete.²⁹ Thus, to the extent there is no statistically significant difference between Verizon's provision of service to competing carriers and its own retail customers, we generally need not look any further. Likewise, if Verizon's provision of service to competing carriers satisfies the performance benchmark, our analysis is usually done. Otherwise, we will examine the evidence further to make a determination whether the statutory nondiscrimination requirements are met.³⁰ Thus, we will examine the explanations that Verizon and others provide about whether these data accurately depict the quality of Verizon's performance. We also may examine how many months a variation in performance has existed and what the recent trend has been. We may find that statistically significant differences exist, but conclude that such differences have little or no competitive significance in the marketplace. In such cases, we may conclude that the differences are not meaningful in terms of statutory compliance. Ultimately, the determination of whether a BOC's performance meets the statutory requirements necessarily is a contextual decision based on the totality of the circumstances and information before us.

²⁹ See *SWBT Kansas/Oklahoma Order* at para. 31; *SWBT Texas Order*, 15 FCC Rcd at 18377, para. 55 & n.102.

³⁰ See *Bell Atlantic New York Order*, 15 FCC Rcd at 3970, para. 59.

14. In this application, we examine performance data as reported in carrier-to-carrier reports reflecting service in the most recent full months before filing (*i.e.*, from September through December 2000). We also examine Verizon's January performance data in a few instances for the limited purpose of confirming the acceptable performance or a trend of improvement shown in earlier months' data. Verizon has asserted that some of these data are affected by a workers' strike that took place in August 2000. We address the relevance of the strike and Verizon's explanations of its impact on the data below in our discussions of specific aspects of Verizon's performance.

IV. PRIMARY ISSUES IN DISPUTE

15. In this Order, we assess all aspects of compliance with section 271, but we focus primarily on the most controversial checklist compliance issues as the Commission did in the recent *SWBT Kansas/Oklahoma Order*.³¹ First, we address checklist item 2, which encompasses access to unbundled network elements, including issues related to OSS and combinations of network elements as well as pricing. We then discuss checklist item 4, access to unbundled local loops. The remaining checklist requirements are then discussed briefly because commenting parties did not comment as extensively, or at all, on them, and our own review of the record leads us to conclude that Verizon has satisfied these requirements. We then address Verizon's showing of compliance with the requirements of Track A in Massachusetts. Finally, we discuss issues concerning compliance with section 272 and the public interest requirement, and our section 271(d)(6) enforcement authority. It is our hope that this approach will serve to focus attention on the section 271 requirements commenting parties address most extensively, while streamlining the discussion of the other less or noncontroversial requirements.

A. Checklist Item 2 – Unbundled Network Elements

1. Pricing of Network Elements

a. Background

16. Checklist item 2 of section 271 states that a BOC must provide “[n]ondiscriminatory access to network elements in accordance with the requirements of sections 251(c)(3) and 252(d)(1)” of the Act.³² Section 251(c)(3) requires LECs to provide “nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory. . . .”³³ Section 252(d)(1) requires that a state commission's determination of the just and reasonable rates for network elements shall be based on the cost of providing the network elements, shall be nondiscriminatory, and may include a reasonable profit.³⁴ Pursuant to this statutory mandate, the

³¹ See *SWBT Kansas/Oklahoma Order* at para. 39.

³² 47 U.S.C. § 271(B)(ii).

³³ *Id.* § 251(c)(3).

³⁴ *Id.* § 252(d)(1).

Commission has determined that prices for unbundled network elements (UNEs) must be based on the total element long run incremental cost (TELRIC) of providing those elements.³⁵

17. Although the United States Court of Appeals for the Eighth Circuit stayed the Commission's pricing rules in 1996,³⁶ the Supreme Court restored the Commission's pricing authority on January 25, 1999, and remanded to the Eighth Circuit for consideration of the merits of the challenged rules.³⁷ On remand from the Supreme Court, the Eighth Circuit concluded that while TELRIC is an acceptable method for determining costs, certain specific rules contained within the Commission's pricing rules were contrary to Congressional intent.³⁸ The Eighth Circuit has stayed the issuance of its mandate pending review by the Supreme Court.³⁹ Accordingly, the Commission's rules remain in effect for purposes of this application.

18. The Massachusetts Department established its prices for UNEs in an extensive proceeding beginning when several carriers requested arbitration of interconnection agreements with Verizon in July 1996.⁴⁰ In Phase 4 of its *Consolidated Arbitrations* proceeding, the Massachusetts Department examined cost studies submitted by Verizon and the competitive LECs that purported to apply the Commission's TELRIC pricing methodology.⁴¹ The Massachusetts Department accepted, for the most part, Verizon's submitted cost model and ordered it to determine the cost of UNEs based on that model.⁴² The interim rates adopted in the *Massachusetts DTE Phase 4 Order* were made permanent by the Massachusetts Department on March 19, 1999.⁴³ From the start of the *Consolidated Arbitrations* proceeding through the filing

³⁵ See *Local Competition First Report and Order*, 11 FCC Rcd at 15844-47, paras. 672-78; 47 C.F.R. §§ 51.501 *et seq.* (1999); see also *Line Sharing Order*, 14 FCC Rcd at 20973-81, paras. 131-57 (concluding that states should set the prices for line sharing as a new network element in the same manner as the states set prices for other UNEs).

³⁶ See *Iowa Utils. Bd. v. FCC*, 109 F.3d 418 (8th Cir. 1996), 120 F.3d 753, 800, 804-06 (8th Cir. 1997), *aff'd in part, rev'd in part sub nom. AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999).

³⁷ *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. at 397.

³⁸ *Iowa Utils. Bd. v. FCC*, 219 F.3d 744 (8th Cir. 2000), *cert. granted sub nom. Verizon Communications, Inc. v. FCC*, 121 S. Ct. 877 (2001).

³⁹ *Iowa Utils. Bd. v. FCC*, No. 96-3321 *et al.* (8th Cir., Sept. 25, 2000).

⁴⁰ See Verizon Massachusetts I Application App. H, Vol. 27, Tab 162, *Consolidated Petitions of New England Telephone and Telegraph Company d/b/a NYNEX, Teleport Communications Group, Inc., Brooks Fiber Communications, AT&T Communications of New England, Inc., MCI Communications Company, and Sprint Communications Company, L.P., Pursuant to Section 252(b) of the Telecommunications Act of 1996, for Arbitration of Interconnection Agreements Between NYNEX and the Aforementioned Companies* D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94—Phase 4 (Dec. 4, 1996) (*Massachusetts DTE Phase 4 Order*).

⁴¹ See *Massachusetts DTE Phase 4 Order* at 6, 8-9.

⁴² See *Massachusetts DTE Phase 4 Order* at 12-17, 71.

⁴³ See Verizon Massachusetts I Application App. F, Vol. 8, Tab 157, *Investigation by the Department on Its Own Motion into the Propriety of the Resale Tariff of New England Telephone and Telegraph Company d/b/a Bell* (continued....)

of Verizon's section 271 applications, commenters have been challenging Verizon's UNE rates in Massachusetts.⁴⁴ On July 24, 2000, the Massachusetts Department approved lower, promotional residential UNE switching rates in an interconnection agreement between Verizon and one carrier, Z-Tel.⁴⁵ These promotional rates were negotiated at the request of the Massachusetts Department and were made available to similarly situated carriers.⁴⁶ In a tariff filing submitted to and approved by the Massachusetts Department on October 13, 2000, during the pendency of Verizon's Massachusetts I Application, Verizon further lowered its UNE rates for switching, transport and switch ports to rates equivalent to those that it currently has in effect in New York.⁴⁷ In filing these October 13th rates with the Massachusetts Department, Verizon explained that the lower rates were intended to "eliminate pricing issues particularly regarding local switching in its Section 271 application now pending before the FCC."⁴⁸

19. On January 12, 2001, the Massachusetts Department opened its scheduled five-year review of UNE rates.⁴⁹ The Massachusetts Department intends to conclude its investigation (Continued from previous page)

Atlantic-Massachusetts, Filed with the Department on January 16, 1998, to Become Effective February 14, 1998, D.T.E. 98-15 (Phases II, III) at 16 (Mar. 19, 1999).

⁴⁴ See Verizon Massachusetts I Application App. H, Vol. 29, Tab 175, *Motion of MCI Telecommunications Corp. for Reconsideration and Clarification of Phase 3 and Phase 4 Orders*, D.P.U. 96-73/74, 96-75, 96-80/81, 96-83, 96-94 (Dec. 31, 1996); Verizon Massachusetts I Application App. F, Vol. 1, Tab 12, *Motion by AT&T Communications of New England, Inc., to Establish Permanent Recurring Rates for Unbundled Network Elements*, D.T.E. 98-15 (Mar. 27, 1998); Verizon Massachusetts I Application App. F, Vol. 7, Tab 126, *Initial Brief of MCI WorldCom, Inc. on the Methodology for Permanent Pricing of Unbundled Network Elements*, D.T.E. 98-15 (Oct. 14, 1998); Verizon Massachusetts I Application App. B, Vol. 37, Tab 455, Letter from Christopher J. McDonald, Senior Attorney, MCI WorldCom, to Mary L. Cottrell, Secretary, Massachusetts Department of Telecommunications and Energy (May 18, 2000); Verizon Massachusetts I Application App. B, Vol. 38, Tab 457, Comments of the Attorney General on Bell Atlantic's May 26, 2000 Supplemental Filing, D.T.E. 99-271 at 17-18 (July 18, 2000).

⁴⁵ See Verizon Massachusetts I Application App. A, Tab 7, Declaration of W. Robert Mudge Attach. A, Amendment No. 2 to the Interconnection Agreement between Bell Atlantic-Massachusetts and Z-Tel Communications, Inc. (June 29, 2000); see also Massachusetts Department Massachusetts I Comments at 221-22.

⁴⁶ See Massachusetts Department Massachusetts I Comments at 221-22.

⁴⁷ Massachusetts Department Massachusetts I Comments at 222-23; Letter from Gordon R. Evans, VP Federal Regulatory, Verizon, to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket No. 00-176 (Oct. 13, 2000) (Verizon October 13th UNE Rate Filing); Verizon Massachusetts I Reply App., Tab 8, Reply Declaration of Steven E. Collins Attach. B, Letter from John L. Conroy, Director Regulatory-Massachusetts, Verizon, to Mary Cottrell, Secretary, Massachusetts Department of Telecommunications and Energy, correcting a typographical error in October 13th filing for unbundled telephone company reciprocal compensation rates (Oct. 18, 2000).

⁴⁸ Verizon October 13th UNE Rate Filing at 2.

⁴⁹ See Verizon Massachusetts II Application App. B, Vol. 3, Tab 4, Subtab D, *Investigation by the Department of Telecommunications and Energy on its own Motion into the Appropriate Pricing, Based upon Total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combination of Unbundled Network Elements, and the Appropriate Avoided Cost Discount for Verizon New England, Inc. d/b/a Verizon Massachusetts' Resale Services in the Commonwealth of Massachusetts*, D.T.E. 01-20 (Jan. 12, 2001) (*Massachusetts DTE UNE Rate Investigation Order*).

and have new UNE rates in place by the end of this calendar year.⁵⁰ The Massachusetts Department asserts that the UNE rates currently in effect are permanent, not interim, despite the fact that the Massachusetts Department is now conducting its regular review of UNE rates.⁵¹

b. Discussion

20. Based on the evidence in the record, we find that Verizon's charges for UNEs made available in Massachusetts to other telecommunications carriers are just, reasonable, and nondiscriminatory in compliance with checklist item 2. Verizon states that it provides UNEs at TELRIC-based rates.⁵² The Massachusetts Department concludes that Verizon has satisfied the requirements of this checklist item.⁵³ The Commission has previously held that it will not conduct a *de novo* review of a state's pricing determinations and will reject an application only if "basic TELRIC principles are violated or the state commission makes clear errors in factual findings on matters so substantial that the end result falls outside the range that the reasonable application of TELRIC principles would produce."⁵⁴ In reviewing Verizon's Massachusetts pricing, we find that the Massachusetts Department generally followed basic TELRIC principles, though adherence to such basic principles, if other key inputs or methodologies are not reasonable, does not ensure that the rates adopted are TELRIC-complaint.⁵⁵

21. Verizon's Massachusetts II Application relies on voluntarily-adopted rates that are equivalent to those currently in place in New York.⁵⁶ In the *Bell Atlantic New York Order*, over a

⁵⁰ See *Massachusetts DTE UNE Rate Investigation Order* at 5.

⁵¹ See Massachusetts Department Massachusetts I Reply at 50-52; see also Massachusetts Department Massachusetts I Comments at 205, 216.

⁵² See Verizon Massachusetts II Application at 40.

⁵³ See Massachusetts Department Massachusetts II Comments at 19-20.

⁵⁴ *Bell Atlantic New York Order*, 15 FCC Rcd at 4084, para. 244; *SWBT Kansas/Oklahoma Order* at para. 59.

⁵⁵ For a discussion of the rates set by the Massachusetts Department, see *infra* Part IX.

⁵⁶ See Verizon Massachusetts II Application at 37-38; Verizon Massachusetts II Reply at 31-32. New York's UNE rates were not adopted in whole because minor adjustments were made to account for rate structure differences. Based on our own analysis, we find that the rates Verizon adopted on October 13, 2000 are equivalent to those approved in New York for those elements, when one accounts for the rate structure differences (e.g. lower port prices and higher per-minute prices in Massachusetts). Comparisons depend on assumption of switch usage, but even with high estimates of switch usage, the Massachusetts rates for ports and switches are only 2 percent more than those in New York. We find that AT&T's assertion that Verizon's voluntarily discounted rates in Massachusetts are not the equivalent of corresponding New York rates is unsubstantiated and without merit, and we agree with the Massachusetts Department that Massachusetts rates are "effectively the same" as the corresponding rates in New York. See AT&T Massachusetts II Comments at 8; see also Letter from Charles E. Griffin, Government Affairs Director, AT&T, to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket No. 01-9 at 3-4 (filed March 21, 2001) (AT&T March 21 *Ex Parte* Letter); Massachusetts Department Massachusetts I Reply at 52-53; Massachusetts Department Massachusetts I Comments at 222-23; Massachusetts Department Massachusetts II Comments at 20-21.

year ago in 1999, the Commission found that these rates complied with the requirements of checklist item 2 for purposes of Verizon's section 271 application.⁵⁷ This decision was affirmed by the United States Court of Appeals for the District of Columbia Circuit.⁵⁸ We note, however, that these rates are at present under active review by the New York Commission.

22. Commenters have raised several objections to Verizon's October 13th UNE switching rates. Specifically, commenters claim that Verizon has not submitted evidence demonstrating that these rates are cost-based.⁵⁹ As the Commission noted in the *SWBT Kansas/Oklahoma Order*, under appropriate circumstances, a BOC's UNE rates will be entitled to a presumption of TELRIC compliance if they are adopted in whole from another state whose rates have been found to comply with TELRIC, and if costs are demonstrated to be at or above the costs in the state whose rates were adopted.⁶⁰ Under this standard, Verizon's October 13th rates will be found to be TELRIC-compliant if Verizon can demonstrate that its switching costs in Massachusetts are the same or higher than in New York. In the *SWBT Kansas/Oklahoma Order*, the Commission also determined that the USF cost model provides a reasonable basis for comparing cost differences between states.⁶¹

23. We find that Verizon's Massachusetts rates at the filing of the application meet the TELRIC-presumption test set forth in the *SWBT Kansas/Oklahoma Order*. An analysis of relative switch costs using our USF model supports this conclusion. In the USF cost model, the Commission estimated forward-looking switch costs by adopting a fixed cost for host and stand-alone switches, and a separate fixed cost for remote switches.⁶² The switch costs in the USF model vary based primarily on the number of lines per switch. The results of regression analysis developed by the Commission through the USF model to estimate switching costs indicate that switching costs per line decrease as the number of lines increases because the fixed cost of switching is spread over a larger number of lines. The results also indicate that switching cost per line decreases as the relative number of remotes in the network increases because the fixed cost for a remote switch is less than that for a host or a stand-alone switch.

⁵⁷ *Bell Atlantic New York Order*, 15 FCC Rcd at 4081, para. 238.

⁵⁸ *AT&T Corp. v. FCC*, 220 F.3d 607, 617-18 (D.C. Cir. 2000).

⁵⁹ WorldCom Massachusetts I Comments at 7-9; ASCENT Massachusetts II Comments at 15; WorldCom Massachusetts II Comments at 12.

⁶⁰ *SWBT Kansas/Oklahoma Order* at para. 82 n.244.

⁶¹ *Id.* at para. 84.

⁶² *Federal-State Joint Board on Universal Service, Forward-Looking Mechanism for High Cost Support for Non-Rural LECs*, CC Docket Nos. 96-45, 97-160, Tenth Report and Order, 14 FCC Rcd 20156, 20281, para. 296 (1999) (*USF Tenth Report and Order*). The Commission also adopted an additional cost per line for remote, host, and stand-alone switches. The determination of host and remote switches in the USF model was based on the Local Exchange Routing Guide (LERG). *See id.*

24. Here, evidence indicates that the number of lines per switch is no greater in Massachusetts than in New York, and it is reasonable to conclude that switch costs would not be lower in Massachusetts than in New York.⁶³ The data used with the Commission's model to estimate switching costs indicate that in Massachusetts Verizon has 16,585 lines per wire center and that in New York it has 20,865 lines per wire center. These data show that in Massachusetts, Verizon's host and stand-alone switches account for 58 percent of the total number of switches and its remote switches account for the remaining 42 percent. The data also show that in New York, Verizon's host and stand-alone switches account for 54 percent of the total number of switches and its remote switches account for the remaining 46 percent. These data underlie the less than two percent higher estimate obtained from the Commission's model of switching cost per line for Massachusetts than for New York.

25. Our finding that Verizon may rely on New York rates is also supported by a comparison of Verizon's costs to Verizon's actual rates. A weighted average of Verizon's voluntarily-discounted Massachusetts rates (switching, transport, and switch ports) and corresponding rates in New York shows that rates in Massachusetts are roughly 5 percent lower than those in New York.⁶⁴ A comparison based on the Commission's USF model of costs in Verizon's study areas in Massachusetts and New York for these same elements indicates that the costs in Massachusetts are roughly the same as the costs in New York.⁶⁵ Because of the rate structure differences between Massachusetts and New York that recover more of the switching costs through the flat-rated port charge in New York, we believe this aggregate comparison is most appropriate. In comparing each of the non-loop elements separately, application of the USF cost model indicates that costs for unbundled switching are almost the same in Massachusetts and New York, with costs in Massachusetts only 1 percent higher. Verizon's per-minute rates for unbundled switching are slightly higher in Massachusetts than in New York, but this is offset by its unbundled switch port rates, which are lower in Massachusetts than in New York. Signaling and transport costs are lower in Massachusetts than in New York, according to the model, and the Massachusetts rates for these elements are correspondingly lower.

26. In addition to our analysis of the switching element costs based on the USF cost model, Verizon has submitted evidence demonstrating that its switching costs in Massachusetts are the same as or higher than its switching costs in New York.⁶⁶ According to Verizon, cost

⁶³ See Letter from Keith L. Seat, Senior Counsel, Federal Law and Public Policy, MCI Communications Corporation, to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket No. 00-176 at 26 (Oct. 3, 2000) (chart showing cumulative distribution of lines by wire center size in Massachusetts and New York).

⁶⁴ This analysis assumed 1200 originating and 1200 terminating local minutes of use per line per month with 25 percent of the minutes intraswitch. The two states' rates remain close using a wide range of assumptions.

⁶⁵ See <http://www.fcc.gov/ccb/apd/hcpm>. We note that AT&T conducted a similar analysis with similar results. Specifically, according to AT&T, rates for the non-loop elements are approximately 7 percent lower in Massachusetts than in New York, and costs for the non-loop elements are 6 percent lower in Massachusetts than in New York. See AT&T Massachusetts II Comments Attach. 4.

⁶⁶ See Verizon Feb. 23 UNE Costs *Ex Parte* Letter at 1. AT&T concurs that switching costs in Massachusetts are the same as those in New York. See AT&T March 21 *Ex Parte* at 2.

studies based on the same assumptions were conducted for Massachusetts and New York, and these studies demonstrated higher costs in Massachusetts than in New York for all switching elements, including local switch usage, common transport, tandem usage, and line ports.⁶⁷

27. We therefore conclude that Verizon's switching rates in Massachusetts are at present within the range that a reasonable application of TELRIC principles would produce, although we recognize that rates may need to evolve over time to take into account updated information on cost inputs and new technologies. The Commission has previously found Verizon's switching rates that, at present, are still in effect in New York to be within a range of TELRIC-based rates.⁶⁸

28. We disagree with AT&T's assertion that New York rates should not be used as the benchmark for measuring whether Verizon's UNE rates are TELRIC-based in Massachusetts. AT&T would like the Commission to use rates found to be TELRIC-based in the SWBT states of Texas, Kansas, or Oklahoma for comparison.⁶⁹ We find that it is permissible to rely on the New York rates in this application because they meet the criteria the Commission established in the *SWBT Kansas/Oklahoma Order*. In the *SWBT Kansas/Oklahoma Order*, to determine whether Oklahoma rates were within the range of what a reasonable application of what TELRIC would produce, the Commission compared SWBT's rates in Oklahoma to its rates in Texas. The Commission stated this was permissible because: 1) they have a common BOC and geographic similarities; 2) they have similar, although not identical, rate structures for comparison purposes; and 3) the Commission had already found the rates in Texas to be reasonable.⁷⁰ Applying this standard to Verizon's Massachusetts rates, we find that New York is a permissible state for UNE rate comparison purposes. The states are adjoining, they have similar rate structures, the Commission has found the New York rates are within a zone that is consistent with TELRIC based on current information in the record, and it is the same BOC in both states.

29. We note, however, that the New York Commission is actively investigating UNE rates and may modify those rates to reflect changed market conditions, technologies, and information. If the New York Commission adopts modified UNE rates, future section 271 applicants could no longer demonstrate TELRIC compliance by showing that their rates in the applicant states are equivalent to or based on the current New York rates, which will have been superseded.

30. Moreover, because Verizon would have us rely on switching rates from the New York proceeding, a decision by the New York Commission to modify these UNE rates may

⁶⁷ See Verizon Feb. 23 UNE Costs *Ex Parte* Letter at 1, 3.

⁶⁸ See *Bell Atlantic New York Order*, 15 FCC Rcd at 4084-85, para. 245.

⁶⁹ See AT&T Massachusetts II Comments at 20-21. AT&T asserts that Verizon resists comparisons to switching rates in other states because switching rates in Massachusetts and New York are substantially higher than those in effect in most other states. See *id.* at n.25.

⁷⁰ *SWBT Kansas/Oklahoma Order* at para. 82.

undermine Verizon's reliance on those rates in Massachusetts and its compliance with the requirements of section 271, depending on the New York Commission's conclusions.⁷¹ We note that the Massachusetts Department has undertaken a review of UNE rates in Massachusetts and is endeavoring to reset UNE rates, consistent with the Act and our rules. We observe that in any context in which prices are not set in accordance with our rules and the Act, we retain the ability going forward to take appropriate enforcement action, including action pursuant to section 271(d)(6).⁷²

31. We disagree with those commenters who take issue with the current New York rates, arguing that they are not TELRIC-based.⁷³ As evidence, the commenters point to the ongoing review of the UNE rates being conducted by the New York Commission.⁷⁴ It was reasonable for Verizon to rely on New York's current switching rates because these rates have been found to be TELRIC-compliant by the New York Commission in an extensive rate-making proceeding,⁷⁵ and by this Commission in the *Bell Atlantic New York Order*,⁷⁶ as affirmed by the D.C. Circuit,⁷⁷ and are at present still in effect. It would be unreasonable to preclude incumbent LECs from relying on appropriate rates that have been found to be TELRIC-compliant merely because these rates are under some form of challenge or review where there has not been a determination that those rates are not TELRIC-compliant.⁷⁸ As the D.C. Court of Appeals stated:

[W]e suspect that rates may often need adjustment to reflect newly discovered information, like that about Bell Atlantic's future discounts. If new information automatically required rejection of section 271 applications, we cannot imagine how such applications could ever be approved in this context of rapid regulatory and technological change.⁷⁹

32. We also reject AT&T's contention that New York and Massachusetts switching rates are significantly higher than the switching rates our cost model generates and, therefore, are

⁷¹ See *infra* Part IX.

⁷² See 47 U.S.C. § 271(d)(6).

⁷³ See ASCENT Massachusetts II Comments at 13-14; AT&T Massachusetts II Comments at 9-11; Sprint Massachusetts II Comments at 9-10.

⁷⁴ See AT&T Massachusetts II Comments at 18; WorldCom Massachusetts II Comments at 13, 16-18.

⁷⁵ See *Bell Atlantic New York Order*, 15 FCC Rcd at 4081-83, 4084, paras. 238-40, 242.

⁷⁶ *Id.* at 4083, para. 242.

⁷⁷ *AT&T Corp. v. FCC*, 20 F.3d at 617-18.

⁷⁸ As discussed above, however, the ongoing New York UNE rate proceeding could result in Verizon falling out of section 271 compliance in Massachusetts.

⁷⁹ *AT&T Corp. v. FCC*, 20 F.3d at 617-18.

not TELRIC-compliant.⁸⁰ The Commission has never used the USF cost model to determine rates for a particular element, nor was it designed to perform such a task. The model was designed to determine relative cost differences among different states, not actual costs. That is the purpose for which the Commission has used the model in the universal service proceeding and that is the purpose for which the Commission used it the *SWBT Kansas/Oklahoma Order* and in this Order.⁸¹

33. Additionally, AT&T's and WorldCom's assertions that New York rates should not be relied on because Verizon applied an incorrect switch discount in New York does not change our conclusion. The commenters argue that Verizon applied a smaller switch discount offered by vendors for expanding existing switches rather than the larger discounts it received for bulk purchases of new switches, based on Verizon's erroneous assertion that the larger discounts were no longer available.⁸² Commenters raised this identical issue, however, during the course of the New York section 271 proceeding, and the Commission addressed it in the *Bell Atlantic New York Order*. The Commission found that the New York Commission had substantially reduced Verizon's originally-proposed switch rates and had "appropriately exercised its flexibility to set prices within a range of TELRIC-based rates."⁸³ Although the New York Commission had initiated a second UNE rate case in which it is reexamining the switch discount issue, this Commission held that the switching rates were "no less TELRIC-compliant on that account,"⁸⁴ and noted the New York Commission's position that correcting the level of switch discounts involved complex adjustments.⁸⁵ The Massachusetts Department has opened a new investigation into the UNE rates where this issue will be addressed. In the meantime, the switching rates are equivalent to those the Commission found to be TELRIC-compliant in New York. AT&T's and WorldCom's attack on the switching discount used in establishing New York rates was considered and rejected in the New York section 271 proceeding. As noted above, however, the

⁸⁰ See AT&T March 21 *Ex Parte* at 3-4.

⁸¹ *SWBT Kansas/Oklahoma Order* at para. 84 (citing *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Ninth Report and Order and Eighteenth Order on Reconsideration, 14 FCC Rcd 20432, 20455-56, paras. 41-42 (1999)).

⁸² See WorldCom Massachusetts I Comments at 13; AT&T Massachusetts I Reply at 23; WorldCom Massachusetts I Reply at 8-9; AT&T Massachusetts I Reply at 28-29; WorldCom Massachusetts I Reply at 20; ASCENT Massachusetts II Comments at 13-14; AT&T Massachusetts II Comments at 7, 9 n.13; Sprint Massachusetts II Comments at 9-10; WorldCom Massachusetts II Comments at 17; AT&T Massachusetts II Reply at 7; WorldCom Massachusetts II Reply at 5.

⁸³ See *Bell Atlantic New York Order*, 15 FCC Rcd at 4085, paras. 245-46.

⁸⁴ *Id.* at 4086, para. 247.

⁸⁵ AT&T incorrectly asserts that the Commission never concluded in the *Bell Atlantic New York Order* that Verizon's switching rates were "TELRIC-compliant." AT&T March 21 *Ex Parte* at 2 n.1. In the *Bell Atlantic New York Order*, the Commission concluded that Verizon's "prices for switches and loops offered as unbundled network elements are priced pursuant to a forward-looking, long-run incremental cost methodology," and that Verizon offered "a full suite of TELRIC rates" for its unbundled network elements. *Bell Atlantic New York Order*, 15 FCC Rcd at 4081, para. 238, 4083, para. 242.

outcome of the ongoing New York UNE rate proceeding could affect Verizon's future section 271 compliance in Massachusetts.

34. The fact that the New York Commission adopted a true-up mechanism for the switching rates pending the outcome of its UNE cost proceeding, while Massachusetts rates are not subject to true-up, does not at present mean that Verizon fails this checklist item.⁸⁶ Although we agree that implementation of such a true-up mechanism pending the outcome of the Massachusetts Department's current UNE cost proceeding could help to ensure that competitive LECs pay cost-based rates, we do not fail Verizon on this checklist item merely because such a mechanism is lacking in Massachusetts. The Commission did not rely on the existence of the true-up mechanism in finding the New York switching rates to be TELRIC-compliant,⁸⁷ although we recognize that in certain circumstances such measures could be appropriate.

35. Although questions have been raised regarding whether the Massachusetts Department will adopt TELRIC-based pricing on a going-forward basis, we note that Massachusetts' permanent UNE rates were adopted by the Massachusetts Department shortly after the passage of the 1996 Act and our rules implementing it.⁸⁸ Since that time, there has been significant guidance on what constitutes TELRIC-based rates from this Commission, other state commissions, and the courts. States may benefit from the experiences of other states that have undertaken extensive pricing analyses. Additionally, circumstances have changed since Massachusetts prices were originally set in late 1996. New developments, technologies, and information, including information as to the kind of switch discounts that would be available if a carrier were building an entire network, have become available since that time. As always, we presume that the Massachusetts Department, like other state commissions, will examine these issues during the course of its ongoing rate case and set rates within the range of what a reasonable application of what TELRIC would produce.

36. We find the concerns of the commenters regarding the pending UNE cost proceeding before the Massachusetts Department to be unwarranted.⁸⁹ As discussed above, the

⁸⁶ See AT&T Massachusetts I Reply at 28-30; Massachusetts Attorney General's Massachusetts I Reply at 9; AT&T Massachusetts II Comments at 4; AT&T March 21 *Ex Parte* at 2; Massachusetts Attorney General's Massachusetts II Comments at 3, 5-6.

⁸⁷ See *Bell Atlantic New York Order*, 15 FCC Rcd at 4085-86, para. 247. The Commission did cite favorably the true-up mechanism adopted by the New York Commission in setting rates for the conditioning of xDSL-capable loops, but these rates were interim at the time of the section 271 filing. See *id.* at 4091, para. 259. Verizon's October 13th switching rates, like its New York switching rates, are not interim.

⁸⁸ See Massachusetts Department Massachusetts I Comments at 204-06. As noted above, commenters have repeatedly challenged Verizon's rates in Massachusetts, but the Massachusetts Department has not changed UNE rates since it set them in 1996. See, e.g., WorldCom Massachusetts I Comments at 34-37; AT&T Massachusetts II Comments at 10. Additionally, as noted above, Verizon voluntarily adopted New York switching rates in Massachusetts.

⁸⁹ See ASCENT Massachusetts II Comments at 14; AT&T Massachusetts II Comments at 10; Massachusetts Attorney General's Massachusetts II Comments at 6 n.12.

fact that a state may conduct a rate investigation and change the rates in the future does not cause an applicant to fail the checklist item at this time. Indeed, rates may well evolve over time to reflect new information on cost inputs and changes in technology or market conditions. The Massachusetts Department has expended an extraordinary amount of effort in its *Consolidated Arbitrations* and other rate-making proceedings. We applaud the Massachusetts Department for the tremendous amount of work it has done, and we expect that it will adopt appropriate cost-based UNE rates in its current proceeding. The Massachusetts Department has committed to conclude its proceeding and implement new UNE rates before the end of this calendar year.⁹⁰

37. Additionally, we find the Massachusetts loop rates to be within the range that the reasonable application of TELRIC principles would produce. Commenters contend that Verizon's UNE-loop rates are not TELRIC-based.⁹¹ The Commission has made clear that it will not overturn a state's pricing decision in the context of a section 271 proceeding where isolated factual findings might differ from what we would find if we were arbitrating the case. Instead, we will reject an application "only if basic TELRIC principles are violated or the state commission makes clear errors in factual findings on matters so substantial that the end result falls outside the range that the reasonable application of TELRIC principles would produce."⁹²

38. Commenters have raised legitimate concerns regarding some of the inputs used by Massachusetts in calculating its loop rates. In particular, we note that the Massachusetts Department utilized a cost of capital of 12.16 percent.⁹³ This is higher than the cost of capital that the Massachusetts Department has used in setting Verizon's local rates⁹⁴ and substantially higher than the cost of capital employed by any of the other states in Verizon's region. AT&T questions whether there is any reason to believe that offering UNEs on a wholesale basis, where Verizon faces no competition, is riskier than offering retail service, where it now has competition.⁹⁵ We question whether this relatively high cost of capital is sufficiently justified by

⁹⁰ See *Massachusetts UNE Rate Investigation Order* at 5; Massachusetts Department Massachusetts II Comments at 22.

⁹¹ See WorldCom Massachusetts I Comments at 30-31; AT&T Massachusetts I Reply at 32-33, Attach. B at 2; WorldCom Massachusetts I Reply at 10-13; AT&T Massachusetts II Comments at 21-24; Sprint Massachusetts II Comments at 9; WorldCom Massachusetts II Comments at 18-19.

⁹² *Bell Atlantic New York Order*, 15 FCC Rcd at 4084, para. 244.

⁹³ See AT&T Massachusetts II Comments at 21-22; Sprint Massachusetts II Comments at 10-11; WorldCom Massachusetts II Comments at 19-22.

⁹⁴ The Massachusetts Department considered whether Verizon's rates set under the last year of rate of return regulation were a reasonable starting point for rates established under price cap regulation and determined that a 9.63 percent rate of return was reasonable for Verizon. The 9.63 percent rate of return reflects an 11.5 percent cost of equity, a 7.16 percent cost of debt, and a capital structure with 41 percent and 59 percent equity. See *Petition of New England Telephone and Telegraph Company d/b/a/ NYNEX for an Alternative Regulatory Plan for the Company's Massachusetts Intrastate Telecommunications Services*, 1995 WL 386802 (Mass. D.P.U. 1995) at 455-516, 528.

⁹⁵ See AT&T Massachusetts I Reply at 17-18; AT&T Massachusetts II Comments at 6-8. The cost of capital used by the Massachusetts Department to set UNE rates is also significantly higher than the 11.25 percent cost of capital (continued....)

state-specific factors. We note, however, that the Massachusetts Department is reviewing this input as part of its current rate case, and, as discussed below, we find that Verizon's loop rates fall within a reasonable TELRIC range.

39. In addition, commenters have pointed out that Massachusetts used substantially lower fill factors⁹⁶ in calculating its UNE-loop rates than this Commission has used in its USF cost model.⁹⁷ For copper distribution cable, which affects loop rates, Verizon used a fill factor of 40 percent for metro, urban, and suburban zones.⁹⁸ In the *SWBT Kansas/Oklahoma Order*, the Commission found that a fill factor of 30 percent for distribution cable was too low because it assumed that too large a percentage of capacity would be idle for an indefinite time, contrary to TELRIC's presumption of an efficient network.⁹⁹ The Commission noted that it adopted fill factors ranging from 50 to 75 percent for the USF cost model, that the Kansas Commission adopted a 53 percent distribution cable fill factor, and that the New York Commission adopted a 50 percent distribution cable fill factor.¹⁰⁰ We question whether the low fill factor used in Massachusetts is appropriate without a state-specific justification. We note, however, that the Massachusetts Department is reviewing this input as part of its current rate case, and, as discussed below, we find that Verizon's rates fall within a reasonable TELRIC range.¹⁰¹

40. Despite our concerns, we conclude that any errors made by the Massachusetts Department in establishing loop rates were not so great as to render the resulting rates outside the range that a reasonable application of TELRIC principles would produce. In reaching this conclusion, we have compared the differences between Verizon's Massachusetts and New York

(Continued from previous page) _____

used by this Commission, and is more heavily weighted towards equity (76 percent) than is the Commission's capital structure (55.8 percent equity, 44.2 percent debt). See WorldCom Massachusetts I Comments at 22; AT&T Massachusetts II Comments at 21-22; Sprint Massachusetts II Comments at 10-11; WorldCom Massachusetts II Comments at 19-22.

⁹⁶ A fill factor is the estimate of the proportion of a facility that will be used.

⁹⁷ See AT&T Massachusetts II Comments at 21-22; Sprint Massachusetts II Comments at 10-11; WorldCom Massachusetts II Comments at 19-22.

⁹⁸ See Verizon Massachusetts I Application App. H, Vol. 31, Tab 198, *NYNEX Phase 2 and Phase 4 Compliance Filing*, Workpapers Part A at 11 (Feb. 14, 1997); see also WorldCom Massachusetts II Frentrup Decl. at para. 21.

⁹⁹ *SWBT Kansas/Oklahoma Order* at para. 80.

¹⁰⁰ *Id.*

¹⁰¹ The commenters point to various other inputs to the cost model used to calculate the Massachusetts loop rates that they assert are incorrect. These inputs include: 1) unrealistically long drop lengths in urban and suburban areas; 2) excessive spare conduit capacity; 3) unreasonably high pole cost assumptions; 4) unreasonably high cost per NID; and 6) unreasonably high cost of cables. See AT&T Massachusetts II Comments at 21-22; Sprint Massachusetts II Comments at 10-11; WorldCom Massachusetts II Comments at 19-22. We do not make any specific finding with regard to these inputs, but expect that the Massachusetts Department will address these inputs in its pending UNE rate proceeding.

loop rates with the relative cost differences between the two states using the USF cost model.¹⁰² According to the USF cost model, average loop costs in Verizon's Massachusetts study area are 8 percent higher than average loop costs in Verizon's New York study area.¹⁰³ Yet loop rates in Massachusetts are only 6 percent higher than in New York.¹⁰⁴ The Commission has already determined that the New York loop rates are TELRIC-compliant.¹⁰⁵ Based on this analysis, we conclude that the loop rates in Massachusetts are also within the reasonable range that application of TELRIC principles would produce.

41. Finally, we do not accept WorldCom's assertion that competitors lack a sufficient profit margin between Verizon's retail and wholesale rates to allow local residential competition over the UNE-P, which indicates that the UNE rates are not TELRIC-based.¹⁰⁶ WorldCom asserts that Verizon's UNE rates do not provide a "viable path to entry" because the rates do not provide a "gross margin" of profit that is "economically viable."¹⁰⁷ In the *SWBT Kansas/Oklahoma Order*, the Commission held that this profitability argument is not part of the section 271 evaluation of whether an applicant's rates are TELRIC-based.¹⁰⁸ The Act requires that we review whether the rates are cost-based, not whether a competitor can make a profit by entering the market. Conducting a profitability analysis would require us to consider the level of a state's retail rates, because such an analysis requires a comparison between the UNE rates and the state's retail rates. Retail rate levels, however, are within the state's jurisdictional authority, not the Commission's.¹⁰⁹ Conducting such an analysis would further require a determination of what a "sufficient profit margin" is. We are hesitant to engage in such a determination.¹¹⁰

¹⁰² As explained above, the New York rates are an appropriate point of comparison because New York and Massachusetts are adjacent states, have similar rate structures, and the New York rates have been found to be TELRIC-compliant.

¹⁰³ See <http://www.fcc.gov/ccb/apd/hcpm>.

¹⁰⁴ AT&T conducted a similar analysis with similar results. Specifically, according to AT&T, loop costs are approximately 10 percent higher in Massachusetts than in New York, while the Massachusetts loop rates exceed the New York loop rates by only 5 percent. See AT&T Massachusetts II Comments Attach. 4.

¹⁰⁵ See *Bell Atlantic New York Order*, 15 FCC Rcd at 4087, para. 249.

¹⁰⁶ See WorldCom Massachusetts II Comments at 2, 6-7, 14, 23; see also AT&T Massachusetts I Comments at 7 n.11; AT&T Massachusetts I Reply at 33-35, 41; AT&T Massachusetts II Comments at 12-14.

¹⁰⁷ WorldCom Massachusetts II Comments App. B, Joint Declaration of Paul Bobeczko and Vijetha Huffman at paras. 9-10 (WorldCom Massachusetts II Bobeczko/Huffman Decl.).

¹⁰⁸ *SWBT Kansas/Oklahoma Order* at paras. 65, 92.

¹⁰⁹ See *SWBT Kansas/Oklahoma Order* at paras. 65, 92; see also *Local Competition First Report and Order*, 11 FCC Rcd at 15922, para. 848 (declining to implement an imputation rule that would prevent price squeezes because doing so would impose substantial burdens on states to rebalance their retail rates).

¹¹⁰ A profitability analysis would also require projections of penetration rates for various services and minutes of use. We are hesitant to engage in those endeavors as well.

Moreover, competition currently exists in Massachusetts through the use of the UNE-P.¹¹¹ The number of UNE-P lines in use in Massachusetts has significantly increased since Verizon's adoption of the October 13th rates.¹¹²

42. We do not accept AT&T's contention that its inability to make a profit by entering the Massachusetts market proves that it is not permitted an "efficient entry," which is contrary to the Commission's prior determination.¹¹³ AT&T's misinterpretation of the Commission's prior holding appears to be based on its equating "efficient entry" with the guarantee of a profit that would induce competitors to enter the market.¹¹⁴ The Commission, in a prior section 271 case, rejected Ameritech's section 271 application because it failed to demonstrate compliance with non-pricing checklist items.¹¹⁵ The Commission did not analyze whether Ameritech complied with the checklist's pricing requirements. It did, however, set forth "general concerns about pricing" with the goal of providing "guidance as to what showing is required in future applications." The Commission concluded that a BOC is not in compliance with section 271's pricing requirements unless it demonstrates that its costs are "based on forward-looking economic costs."¹¹⁶ The Commission determined that new entrants "should make their decisions whether to purchase unbundled elements . . . based on the relative economic costs of these options," and that such competitors would not be able to make such decisions "efficiently" unless the BOC was offering UNEs based on forward-looking economic costs. The Commission equated "efficient entry" with the availability of UNEs at forward-looking economic costs, which "replicates . . . the conditions of a competitive market."¹¹⁷ "Efficient entry" simply means that competitors seeking entry will face the same sorts of costs they would face in a fully competitive market, that is, TELRIC-based UNE rates. The Commission's use of TELRIC was designed to prevent "inefficient entry" conditions, a situation in which competitors would have to bear unreasonably higher costs than incumbents. Contrary to AT&T's assertion, the concept of "efficient entry" does not guarantee that any competitors will necessarily enter the market. Even if competitors can gain "efficient entry" to a market through the availability of TELRIC-based UNE rates, they may still decide not to enter based on their independent

¹¹¹ See Z-Tel Massachusetts I Comments at 3-4.

¹¹² See Verizon Massachusetts II Application Attach. B (chart showing the number of competitive LEC platforms at 12,000 in September 2000, and at 23,000 in November 2000). As of December 2000, approximately 35 percent of the total UNE-Ps in Massachusetts were used for residential service. See Letter from Dee May, Executive Director Federal Regulatory, Verizon, to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket No. 01-9 at 6 (filed Feb. 15, 2001).

¹¹³ AT&T Massachusetts I Reply at 40-41.

¹¹⁴ *Id.*; see also AT&T Massachusetts II Comments Tab 2, Letter from Richard Rubin, Senior Attorney, AT&T to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket No. 00-176 at 2 (Nov. 30, 2000).

¹¹⁵ *Ameritech Michigan Order*, 12 FCC Rcd at 20694, para. 281.

¹¹⁶ *Id.* at 20697-98, para. 289.

¹¹⁷ *Id.*

determinations that they cannot turn a sufficient profit in the market. As long as UNE rates are cost-based under TELRIC, however, a BOC has satisfied its obligations under sections 251 and 252. We thus find that AT&T has misinterpreted the Commission's determinations in the *Ameritech Michigan Order* and that its assertion does not cause Verizon to fail this checklist item.

2. Access to Operations Support Systems

a. Background

43. The Commission has defined OSS as the various systems, databases, and personnel used by incumbent LECs to provide service to their customers,¹¹⁸ and consistently has found that nondiscriminatory access to OSS is a prerequisite to the development of meaningful local competition.¹¹⁹ Our discussion of Verizon's Operations Support Systems (OSS) begins by outlining our general approach to analyzing the adequacy of an applicant's OSS. Next, we describe the analytical roadmap we use in reviewing the results of independent third-party OSS testing in the applicant's state. Also, because Verizon contends that its line sharing OSS in Massachusetts is the same as its line sharing OSS in New York, we also describe the roadmap we use in reviewing the BOC's reliance on its performance and OSS in another state where substantially greater volumes of commercial data exist to demonstrate the adequacy of its OSS in the applicant state. We then individually analyze Verizon's performance in providing access to the five critical OSS functions: pre-ordering (which includes access to loop qualification information), ordering, provisioning, maintenance and repair, and billing. Finally, we address Verizon's change management process and the technical assistance that Verizon offers to competing carriers seeking to use its OSS. Because the Commission has described its two-step analysis of OSS in previous orders, we do not repeat that analytical approach here.¹²⁰ We instead proceed to evaluate the adequacy of Verizon's Massachusetts OSS consistent with the analysis the Commission has applied previously.

b. Third-Party Testing

44. *KPMG's Independent Third-Party Testing.* The Massachusetts Department retained KPMG to conduct an independent, third-party test of the readiness of Verizon's OSS,

¹¹⁸ See *Bell Atlantic New York Order*, 15 FCC Rcd at 3989-90, para. 83; *Application of BellSouth Corporation, et al., Pursuant to Section 271 of the Communications Act of 1934, as amended, to Provide In-Region, InterLATA Services in South Carolina*, CC Docket No. 97-208, Memorandum Opinion and Order, 13 FCC Rcd 539, 585 (*BellSouth South Carolina Order*); *SWBT Texas Order*, 15 FCC Rcd at 18396-97, para. 92.

¹¹⁹ See *Bell Atlantic New York Order*, 15 FCC Rcd at 3990, para. 83; *Application by BellSouth Corporation, et al., Pursuant to Section 271 of the Communications Act of 1934, as Amended, to Provide In-Region, InterLATA Services in Louisiana*, CC Docket No. 98-121, Memorandum Opinion and Order, 13 FCC Rcd 20599, 20653 (*Second BellSouth Louisiana Order*); *BellSouth South Carolina Order*, 13 FCC Rcd at 547-48, 585.

¹²⁰ See, e.g., *Bell Atlantic New York Order*, 15 FCC Rcd at 3991-92, paras. 85-86; *SWBT Kansas/Oklahoma Order* at paras. 104-05.

interfaces, documentation and processes.¹²¹ KPMG's test was broad in scope.¹²² All stages of the relationship between Verizon and competing carriers were considered, from establishing the initial relationship, to performing daily operations, to maintaining the relationship. Resale, UNE-loops, UNE-P, and combinations were all included in the test. In addition, both the application-to-application electronic data interchange (EDI) and the terminal-type web-based graphical user interface (GUI) were tested.¹²³ KPMG performed pre-ordering, ordering, provisioning, maintenance and repair, billing, and relationship management and infrastructure tests to evaluate functional capabilities and determine whether competing carriers receive a level of service comparable to Verizon retail service.¹²⁴ To fully test these systems, orders were submitted with known error conditions, canceled, and supplemented.¹²⁵ To perform these transaction-driven tests, KPMG combined efforts with Hewlett Packard.¹²⁶ Documentation was evaluated for usefulness, correctness, and completeness.¹²⁷ KPMG also performed stress volume tests of Verizon systems and identified specific bottlenecks for wholesale customers.¹²⁸

45. In performing these tests, KPMG adopted a military-style test standard.¹²⁹ Thus, when situations arose where testing revealed that a Verizon process, document, or system did not meet expectations, Verizon would formally respond by providing a clarification or describing its intended fix for the problem, and KPMG would retest the process, document, or system as

¹²¹ Massachusetts Department Massachusetts I Comments at 44; Verizon Massachusetts I Application at 9.

¹²² KPMG indicates that its Massachusetts evaluation was designed as a validation of the shared components of the Massachusetts and New York OSS, as well as a full evaluation of the OSS elements unique to Massachusetts. *See* KPMG Final Report at 10. Despite this characterization, KPMG's test was not an evaluation of the comparability of Verizon's Massachusetts and New York OSS, and was therefore unlike the Ernst and Young audit attestation relied upon by the Commission in approving SWBT's application for section 271 authorization in Kansas and Oklahoma. *See SWBT Kansas/Oklahoma Order* at paras. 106-18. Rather, KPMG's test in Massachusetts was in essence a full independent third-party test of Verizon's Massachusetts OSS, including functional and volume testing specifically of the Massachusetts OSS. Aside from PricewaterhouseCoopers' line sharing study discussed below, Verizon has not submitted the type of evidence that we require in order to consider the performance of its OSS in another state in evaluating its Massachusetts OSS. *See id.* For this reason, except as described below (*infra* at paras. 47-49), we do not consider the performance of Verizon's OSS in other states in reaching our conclusions, nor do we address commenters' criticisms of Verizon's OSS in other states.

¹²³ *See* KPMG Final Report at 6.

¹²⁴ In addition, KPMG evaluated the integrity of Verizon's internal handling of raw source data and validated Verizon's calculation of results for a series of metrics measuring Verizon's performance of pre-ordering, ordering, provisioning, maintenance and repair, billing, network performance and operator services functions. *See id.* at 631.

¹²⁵ *See, e.g., id.* at 15.

¹²⁶ *See id.* at 7.

¹²⁷ *See, e.g., id.* at 129-50, 315-36, and 403-10.

¹²⁸ *See, e.g., id.* at 44-45 (testing the EDI interface at 150 percent of Verizon's normal hourly order volume).

¹²⁹ *See id.* at 8-9.